Monitoring Data Record

Project Title: R-2248D – Charlotte Outer Loop COE Action ID: 200131321
Stream Name: Trib. to Dixon Branch (Site 24) DWQ Number: 011231
City, County and other Location Information: Mecklenburg County, Charlotte Outer Loop, R-2248D Sta. 378+15 to 379+40 –L- Left and Sta.380+16 to 381+23 –L- Left
Date Construction Completed: February 2005 Monitoring Year: (2) of 5
Ecoregion: 8 digit HUC unit 03050103
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 1020 ft. Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 3/16/10
Applicant Information:
Name: NCDOT – Roadside Environmental Unit
Address: 1425 Rock Quarry Rd, Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status:

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level **1**

The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period or through two documented bankfull flow events: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action);visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 12 photos were taken from 6 photo point locations

Dates reference photos have been taken at this site: 2/23/09, 9/1/09, 3/16/10

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference: A site map with photo point locations is attached to this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):
The planted vegetation is minimal from Sta. 380+16 to 381+23 for both Type I and II plantings and from Sta. 378+15 to 379+40 about 60% of the live stakes (Type I) are surviving but the buffer (Type II) planting is minimal.

Estimated causes, and proposed/required remedial action: NCDOT proposes to replant Type II plantings throughout Site 24. Live staking should take place wherever missing or dead stakes are found. This should take place following the remedial work on the stream relocation.

ADDITIONAL COMMENTS: The planted vegetation noted onsite consisted of silky dogwood, black willow, sycamore, and winged elm. Other vegetation noted onsite consisted of cattails, fennel, briars, lespedeza, wax myrtle, *Juncus* sp., sweetgum, pine, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT to Dixon Branch (Site 24) stream relocation has experienced some instability prior to the Year 2 Winter evaluation. The stream bed has down cut around Sta. 380+40 which can be seen from Photo Point #3. Some minor bank erosion around some of the rootwads was noted from Sta. 378+15 to 379+40. Some erosion was noted along the cut slope at Sta. 379+00. A bankfull event had occurred on site since the last monitoring evaluation. NCDOT plans to perform remedial work at this stream relocation to repair the unstable areas.

Date 3/16/10	Station 378+15 to 379+40	Station 380+40	Station 379+00	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?		Stream bed has down cut			
Bank or scour erosion present?	Bank erosion around rootwads				
Other problems noted?			Erosion on cut slope		

UT to Dixon Branch

Site 24

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Year 2 Winter – March 2010

UT to Dixon Branch

Site 24

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

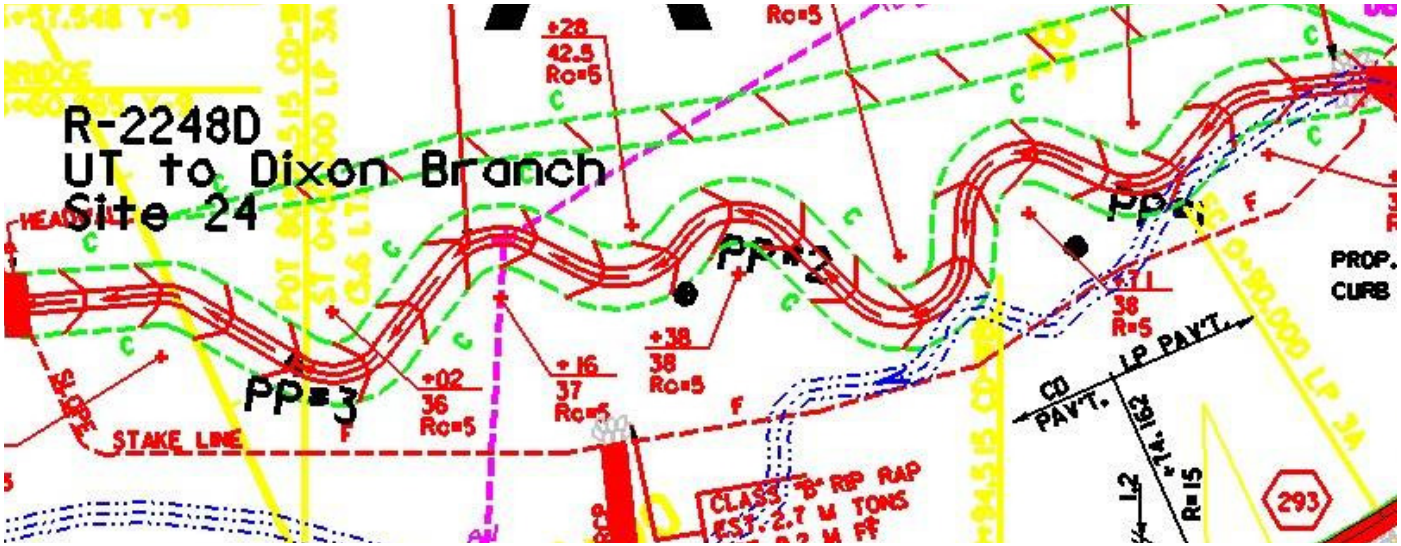
Photo Point #5 (Upstream)

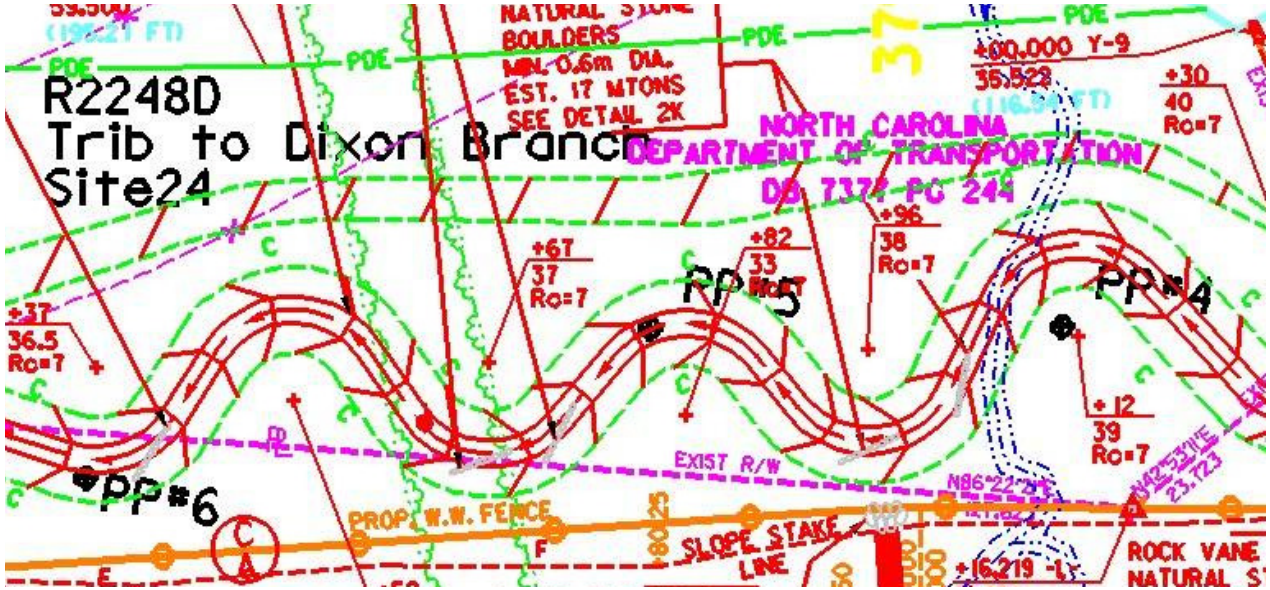
Photo Point #5 (Downstream)

Photo Point #6 (Upstream)

Photo Point #6 (Downstream)

Year 2 Winter – March 2010


R-2248D
UT to Dixon Branch
Site 24
PP#3
PP#2
PP#1
+28
42.5
Rc=5
+38
38
Rc=5
+02
36
Rc=5
+16
37
Rc=5
38
Rc=5
PROP.
CURB
CD
PAV'T.
LP PAV'T.
R=15
293
STAKE LINE
SLOPE


R2248D
Trib to Dixon Branch
Site24
NATURAL STONE
BOULDERS
MIN. 0.6m DIA.
EST. 17 MTONS
SEE DETAIL 2K
PDE
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DB 7374 PG 244
+00.000 Y-9
35.523
+30
40
Ro=7
+96
38
Ro=7
+82
33
Ro=7
+67
37
Ro=7
+37
36.5
Ro=7
+12
39
Ro=7
PP#4
PP#5
PP#6
EXIST R/W
PROP. W.W. FENCE
SLOPE STAKE
LINE
ROCK VANE
NATURAL S